Application No.: 10/527,830 Docket No.: 21581-00476-US

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) A method of producing copolyester by a culture of a microorganism which comprises controlling a specific substrate feed rate of a carbon source at a constant value throughout the whole culture period,

wherein said copolyester is a biodegradable copolyester,

wherein the microorganism is a microorganism capable of producing said copolyester,

wherein said copolyester comprises hydroxybutyric acid units, and wherein the microorganism is a transformed microorganism into which a polyester polymerase gene is incorporated, and wherein the copolyester contains 3-hydroxyhexanoic acid units, and

wherein the carbon source substantially consists essentially of natural oils or fats, or fractionated oils or fats.

- 2. (Withdrawn) A culture method in producing a copolyester by a microorganism which comprises applying a different specific substrate feed rate of an oil or fat used as a carbon source between a cell growth phase and a polyester accumulation phase in a culture and controlling the rate at a constant value during the respective phases.
- 3. (Previously Presented) The culture method according to Claim 1, which comprises controlling a composition of the produced copolyester by selecting a species of oil or fat and/or a control value for the specific substrate feed rate,

wherein the oil or fat contains at least one oil or fat selected from the group consisting of soybean oil, corn oil, cottonseed oil, palm oil, palm kernel oil, coconut oil, peanut oil, and fractionated oils obtained by fractionating these oils.

4. (Previously Presented) The culture method according to Claim 1,

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wherein the oil or fat used as a carbon source contains at least one oil or fat selected from the group consisting of soybean oil, corn oil, cottonseed oil, palm oil, palm kernel oil, coconut oil and peanut oil, and fractionated oils obtained by fractionating these oils.

(Previously Presented) The culture method according to Claim 1,
wherein the oil or fat used as a carbon source contains lauric acid in the constituent fatty
acids, and

the culture is carried out under conditions where phosphorus is restricted.

6. (Previously Presented) The method according to Claim 1,

wherein the host of said transformed microorganism is selected from the group consisting of microorganisms which belong to the genus *Ralstonia*, the genus *Pseudomonas*, the genus *Aeromonas*, the genus *Alcaligenes* and the genus *Escherichia*.

- 7. (Canceled)
- 8. (Canceled)
- 9. (Withdrawn) The culture method according to Claim 2, which comprises controlling the composition of the produced copolyester by selecting the species and/or the control value for the specific substrate feed rate.
- 10. (Withdrawn) The culture method according to claim 2,

wherein the oil or fat used as a carbon source contains at least one oil or fat selected from the group consisting of soybean oil, corn oil, cottonseed oil, palm oil, palm kernel oil, coconut oil and peanut oil, and fractionated oils obtained by fractionating these oils.

11. (Withdrawn) The culture method according to Claim 2, wherein the oil or fat used as a carbon source contains lauric acid in the constituent fatty acids, and Application No.: 10/527,830 Docket No.: 21581-00476-US

the culture is carried out under the condition phosphorus being restricted.

12. (Withdrawn) The method according to Claim 2, wherein the microorganism is selected from the group consisting of microorganisms belong to the genus *Ralstonia*, the genus *Pseudomonas*, the genus *Aeromonas*, the genus *Alcaligenes* and the genus *Escherichia*.

- 13. (Withdrawn) The culture method according to Claim 2, wherein the microorganism is a transformed microorganism into which a polyester polymerase gene is incorporated.
- 14. (Withdrawn) The culture method according to Claim 2, wherein the copolyester contains 3-hydroxyhexanoic acid unit.
- 15. (Cancelled)